

Long-lasting peripherally inserted central catheter in pediatric oncological patients - application of a guideline: a single center experience

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Introduction

Vascular accesses in children for treatment of oncological diseases is challenging. Two important factors that contribute are size of the vessel and patient's surface body area. Additionally, socio-demographic factors also contribute, given as how Colombia remains a low-to-medium income country and the use of these costly resources remains a challenge. The application of this guideline shows seventeen cases of long-lasting central catheters in pediatric oncological patients in the Fundación Cardioinfantil hospital, in Bogotá, Colombia.

Materials & Methods

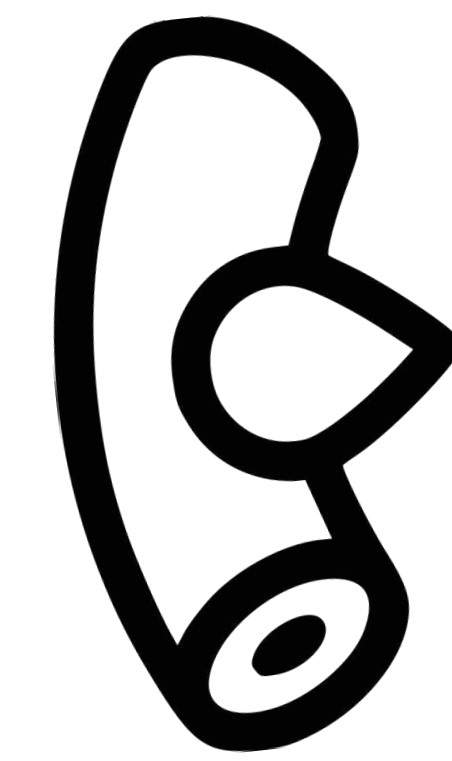
Using a database of the Vascular Vessels Service between the January 2017 and January 2018, seventeen oncological patients were found using peripherally inserted central catheter for full chemotherapy treatment. PICC placement was performed with the aid of a sonogram by a qualified professional from the vessels team and the use of an institutional guide. In our institution, this team comprises of a General Surgeon, the chief of nursing, as well as other trained personnel.

Results

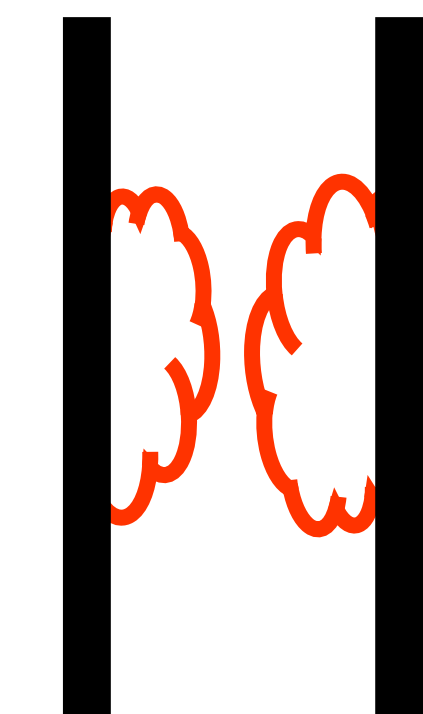


17 cases reported

Average age: 10-years-old (IQR 8 years)

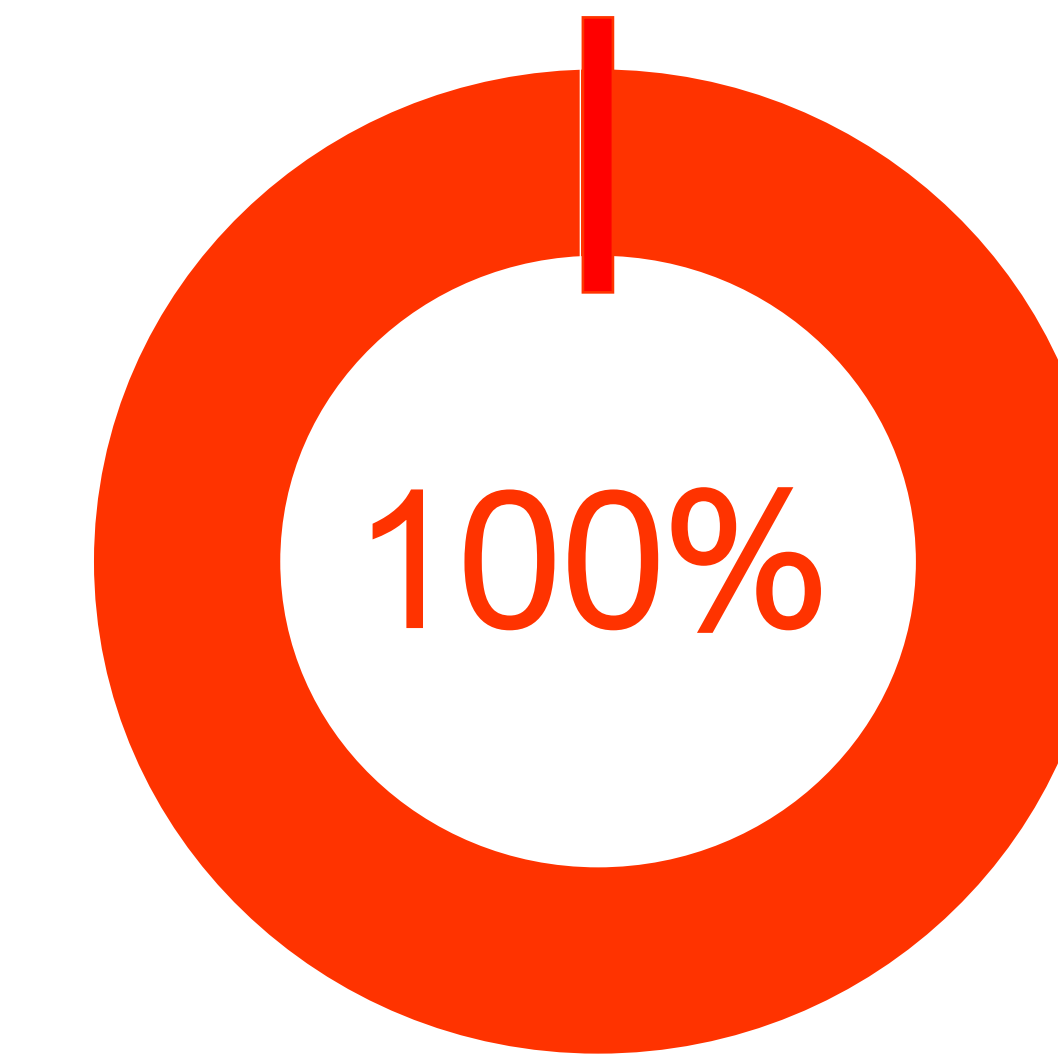


Basilic vein used in all cases



Two patients developed thrombosis

Median catheter duration: 65 days (IQR 130 days)



Success rate

All the patients completed chemotherapy satisfactorily

Conclusion

When it comes to choosing PICC in pediatric oncological patients, having highly qualified personnel and a complete guideline is key. This ensures an adequate vascular access for oncological treatment and prevents future complications derived from insertion as well as the catheter itself.